Dissemination Services

Vision

To ensure all people in the United States receive the climate, water, and weather information they want, when and where they want it. To deliver timely alerts to all people at risk of hazards.

Concept of Operations

The NWS delivers information in two major categories:

- ✓ Time-critical watches, warnings, and supporting information, directed to people in affected areas.
- ✓ Routine weather data formatted in bulletin form, bulk data form, and in digital databases. This data is archived in accessible storage, for electronic retrieval by interested parties.

The NWS relies on the delivery services provided by emergency managers; local, state, Federal, and international government agencies; the media; the commercial weather sector; academia; and community organizations.

The NWS products are in text, graphical, digital, Geographical Information System (GIS), and audio formats. The NWS also disseminates time-critical, non-weather-related emergency messages from other Government authorities. These additional "all hazards" emergency messages may include both natural and technological events.

More information on dissemination services is available at http://www.nws.noaa.gov/os/disemsys.shtml.

Customer and Partner Requirements

The requirements of our partners and customers are evolving. The NWS is working to ensure response to the following requirements:

- ✓ **Timeliness:** Deliver data in a timely manner.
- ✓ **Interactivity:** When a user requests to pull information from NWS file servers, that information will be delivered in a reasonable time period to the extent it is within NWS control.
- ✓ **Reliability:** The service must be completely reliable for warnings and watches.
- ✓ **Quality:** Product formats and codes will be consistent. Dissemination systems should not degrade the quality of the original information.
- ✓ **Adaptability:** Formats and mechanisms will adapt to changing needs. The architecture will be built on industry standards, which can interface with new technologies, such as mobile devices.
- ✓ **Capacity:** NWS and its dissemination partners need to plan capacity expansion for a growing number of users and for increased volumes and complexities of data.

Science and Technology Requirements

- ✓ Deliver critical information using industry standards, including eXtensible Markup Language (XML) and Common Alerting Protocol (CAP).

- ✓ Deliver information in new formats to support gridded, graphical, Geographic Information Systems (GIS), and textual distribution and display.
- ✓ Develop an interactive forecast system from which customers produce user-defined, site-specific forecast information.
- ✓ Develop geo-targeted watches and warnings addressed to sub-county areas.

Integrated Requirements

- ✓ Deliver baseline product formatters to NWS offices.
- ✓ Install quality control checker software in baseline watch/warning/advisory product generation applications.
- ✓ Disseminate event-driven watch/warning/advisory products with Valid Time Event Code (VTEC).

Service Area Highlights

Aviation

- ✓ Deliver new and improved products via the NWS Family of Services.
- ✓ Distribute significant weather forecast products internationally with the International Satellite Communications System (ISCS).
- ✓ Develop and implement a comprehensive residence and distance-learning training program for meteorologists and pilots in the use and availability of forecast products.
- ✓ Release additional information at http://aviationweather.gov/.

Climate

- ✓ Post all climate products, experimental and official, on the Internet at http://www.cpc.ncep.noaa.gov/ and http://www.nws.noaa.gov/os/csd/.

Digital

- ✓ Share the digital forecast database and converstion tools, with a large host of clients.
- ✓ Visit these Internet sites for more information: ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/, http://www.nws.noaa.gov/

NWS Dissemination services deliver communications during the most deadly natural hazards, including tornados.

forecasts/graphical/. Tools are also availabe at http://www.nws.noaa.gov/mdl/NDFD_GRIB2Decoder/.

Fire

- ✓ Include Remote Automatic Weather Stations (RAWS) on Emergency Managers Weather Information Network (EMWIN).
- ✓ Release additional information at http://raws.boi.noaa.gov/rawssum.html and http://fire.boi.noaa.gov/.

Hydrology

- ✓ Continue enhancing the Advanced Hydrologic Prediction Service (AHPS) Web pages.
- ✓ Update information at http://www.nws.noaa.gov/oh/ahps/ and http://www.nws.noaa.gov/os/water/.

Marine

- ✓ Expand prototyping of cell-phone compatible marine and tropical cyclone products.
- ✓ Prototype a remote radiofax monitoring system.
- ✓ Update information at http://www.nws.noaa.gov/om/marine/home.htm#dissemination and http://www.nws.noaa.gov/om/marine.shtml.

Observing

- ✓ Develop and implement access to high-resolution surface mesonets through the Meteorological Assimilation Data Ingest System (MADIS).
- ✓ Update information at http://www-sdd.fsl.noaa.gov/MADIS/ and http://www.nws.noaa.gov/os/coop/recent-obs.htm.

Public

- ✓ Streamline the public weather product suite by tailoring information and services to reduce redundancy and increase consistency.

Space

- ✓ Update information on space weather services at http://www.sec.noaa.gov/SWN/.

Service Change

- ✓ Deploy digital capability to streamline creation, authentication, and collection of non-weather emergency messages in a quick and secure fashion. This will speed alert and warning dissemination to support NOAA's responsibility in the National Response Plan (NRP), including using NWS dissemination systems to publicize alerts and warnings.

Milestones by Quarter

1st Quarter

- Test and evaluate VTEC.

2nd Quarter

- Implement VTEC in most event-driven text products to provide supplementary information to the Universal Geographic Code (UGC), and further aid in automated delivery of NWS text products.

3rd Quarter

- Issue new experimental tropical cyclone product with VTEC for partner and customer evaluation.

4th Quarter

- Implement improved audio and Internet-accessible listings of NOAA Weather Radio (NWR) station broadcast service areas and the associated six-digit Specific Area Message Encoding (SAME) code needed to program weather radio receivers.

Outreach

- ✓ Conduct VTEC and warning dissemination capabilities briefings at appropriate media and hydrometeorology industry conferences, including those of the National Weather Association (NWA), American Meteorological Society (AMS), National Association of Broadcasters (NAB), and Radio and Television News Directors Association (RTNDA).
- ✓ Continue interactions with partners and customers in all phases of the VTEC Operational Tests and Evaluations (OT&E).
- ✓ Continue interactions with the Department of Homeland Security (DHS), Federal Communications Commission (FCC), Media Security and Reliability Council, Partnership for Public Warning (PPW), and other Federal, state, and local agencies involved in homeland security.
- ✓ Present all-hazards dissemination and NWR exhibits at government and industry conferences including NAB, National League of Cities (NLC), Consumer Electronics Show (CES), Association of Late Deafened Adults (ALDA), Self Help for Hard of Hearing People (SHHH), PPW, International Association of Emergency Managers (IAEM), and National Emergency Management Association (NEMA).
- ✓ Conduct NWS Family of Services and NWS Partners workshops.

Contact Information

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Photo by Deborah Lavine, QSS

NOAA Meteorologist Wayne Weeks explains benefits of NOAA All Hazards Weather Radio to an avid sea kayaker during the Smithsonian Folklife Festival in Washington, D.C.